

***Quick Dually™* Mowers**

Featuring the EZR™ Control System



Better Outdoor Products, LLC

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Warning

CALIFORNIA Proposition 65 Warning.
The engine exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm.

This spark ignition system complies with Canadian ICES-002.

Important: This engine is not equipped with a spark arrester muffler. It is a violation of California Public Resource Code Section 4442 to use or operate the engine on any forest-covered, brush-covered, or grass-covered land. Other states or federal areas may have similar laws.

The enclosed Engine Owner's Manual is supplied for information regarding the US Environmental Protection Agency (EPA) and the California Emission Control Regulation of emission systems, maintenance, and warranty. Replacements may be ordered through the engine manufacturer.

Introduction

Thank you for purchasing one of our Quick Dually™ series mowers. If this product does not work to your total satisfaction, let us know and we will do our best to make it right.

Read this information carefully to learn how to operate and maintain your product properly and to avoid injury and product damage. You are responsible for operating the product properly and safely.

You may contact Better Outdoor Products™ directly at service@betteroutdoorproducts.com for product and accessory information.

Whenever you need service, genuine Better Outdoor Products™ parts, or additional information, contact Better Outdoor Products™ Customer Service and have the model and serial numbers of your product ready. **Figure 1** identifies the location of the model and serial number on the product. Write your numbers in the space provided.

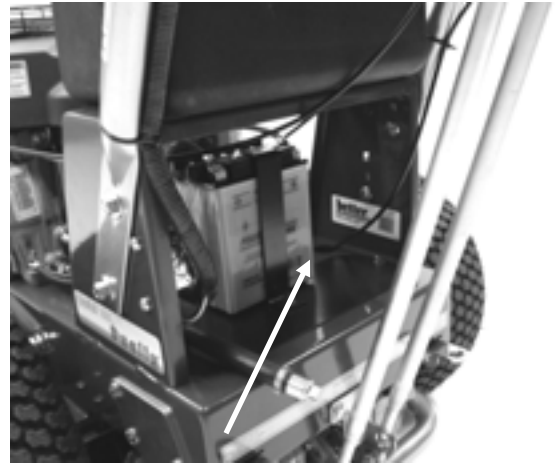


Figure 1

1. Location of the Serial Number

Model No. _____

Serial No. _____

Purchase Date _____

This manual identifies potential hazards and has safety messages identified by the following words:

- **Danger** signals an extreme hazard that will cause serious injury or death if you do not follow the recommended precautions.
- **Warning** signals a hazard that may cause serious injury or death if you do not follow the recommended precautions.
- **Caution** signals a hazard that may cause minor or moderate injury if you do not follow the recommended precautions.

This manual uses two other words to highlight information. **Important** calls attention to special mechanical information and **Note** emphasizes general information worthy of special attention.



Do not operate this machine without first reading owner's manual and engine manufacturer's manual.



Use of Ear Protection is recommended while operating this machine.



Use of Eye and Breathing protection is recommended when using this machine.

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Safety


Safety

Note: The addition of attachments made by other manufacturers that do not meet American National Standards Institute certification will cause noncompliance of this machine. Improper use or maintenance by the operator or owner can result in injury. To reduce the potential for injury, comply with these safety instructions and always pay attention to the safety alert symbol , which means **CAUTION**, **WARNING**, or **DANGER**-“personal safety instruction.” Failure to comply with the instruction may result in personal injury or death.

Safe Operating Practices

The following instructions are from ANSI standard B71.4-2004.

Training

-  Read the Operator's Manual and other training material. If the operator(s) or mechanic(s) can't read English it is the owner's responsibility to explain this material to them.
- Become familiar with the safe operation of the equipment, operator controls, and safety signs.
- All operators and mechanics should be trained. The owner is responsible for training the users.
- **Never** let children or untrained people operate or service the equipment. Local regulations may restrict the age of the operator.
- The owner/user can prevent and is responsible for accidents or injuries occurring to himself or herself or other people or property.

Preparation

- Evaluate the terrain to determine what accessories and attachments are needed to properly and safely perform the job. Only use accessories and attachments approved by the manufacturer.
- Wear appropriate clothing including hard hat, safety glasses and hearing protection. Long hair, loose clothing or jewelry may get tangled in moving parts.
- Inspect the area where the equipment is to be used and remove all objects such as rocks, toys and wire which can be thrown by the machine.
- Use extra care when handling gasoline and other fuels. They are flammable and vapors are explosive.
- Use only an approved container
- **Never** remove gas cap or add fuel with engine running.
- Allow engine to cool before refueling.
- **Do Not** smoke.
- **Never** refuel or drain the machine indoors.
- Check that operator's presence controls, safety switches and shields are attached and functioning

properly. **Do Not** operate unless they are functioning properly.

Operation

- **Never** run an engine in an enclosed area.
- Only operate in good light, keeping away from holes and hidden hazards.
- Be sure all drives are in neutral and parking brake is engaged before starting engine. Only start engine from the operator's position.
- Be sure of your footing while using this machine especially when backing up. Walk, don't run. **Never** operate on wet grass. Reduced footing could cause slipping.
- Slow down and use extra care on hillsides. Be sure to travel side to side on hillsides. Turf conditions can affect the machine's stability. Use caution while operating near drop-offs.
- Slow down and use caution when making turns and when changing directions on slopes.
- **Never** raise deck with the blades running.
- **Never** operate with the mower deck belt guard, or other guards not securely in place. Be sure all interlocks are attached, adjusted properly, and functioning properly.
- **Never** operate with the discharge deflector raised, removed or altered, unless using a grass catcher.
- **Do Not** change the engine governor setting or over speed the engine.
- Stop on level ground, disengage drives, engage parking brake (if provided), shut off engine before leaving the operator's position for any reason including emptying the catcher or unclogging the chute.
- Stop equipment and inspect blades after striking objects or if an abnormal vibration occurs. Make necessary repairs before resuming operations.
- Keep hands and feet away from the cutting unit.
- Look behind and down before backing up to be sure of a clear path.
- Keep pets and bystanders away.
- Slow down and use caution when making turns and crossing roads and sidewalks. Stop blades if not mowing.
- Be aware of the mower discharge direction and do not point it at anyone.
- **Do Not** operate the mower under the influence of alcohol or drugs.
- Use care when loading or unloading the machine onto or from a trailer or truck.
- Use care when approaching blind corners, shrubs, trees, or other objects that may obscure vision.

Maintenance and storage

- Disengage drives, set parking brake, stop engine and remove key or disconnect spark plug wire(s). Wait for all movement to stop before adjusting, cleaning or repairing.
- Clean grass and debris from cutting unit, drives, mufflers, and engine to help prevent fires. Clean up oil or fuel spillage.
- Let engine cool before storing and **Do Not** store near flame.
- Shut off fuel while storing or transporting. **Do Not** store fuel near flames or drain indoors.
- Park machine on level ground. Set parking brake. **Never** allow untrained personnel to service machine.
- Use jack stands to support components when required.
- Carefully release pressure from components with stored energy.
- Disconnect the battery or remove spark plug wire(s) before making any repairs. Disconnect the negative terminal first and the positive last. Reconnect the positive first and negative last.
- Use care when checking blades. Wrap the blade(s) or wear gloves, and use caution when servicing them. Only replace blades. **Never** straighten or weld them.
- Keep hands and feet away from moving parts. If possible, **Do Not** make adjustments with the engine running.
- Keep all parts in good working condition and all hardware tightened. Replace all worn or damaged decals.

Quick™ Mower Safety

The following list contains safety information specific to Better Outdoor Products™ and other safety information you must know. This product is capable of amputating hands and feet and throwing objects. Always follow all safety instructions to avoid serious injury or death. This product is designed for cutting and mulching grass or, when equipped with a grass bagger, for catching cut grass. Any use for purposes other than these could prove dangerous to user and bystanders.

General Operation

- Be sure the area is clear of other people before mowing. Stop the machine if anyone enters the area.
- **Do Not** touch equipment or attachment parts which may be hot from operation. Allow to cool before attempting to maintain, adjust or service.
- Use only Better Outdoor Products™ approved attachments. Warranty may be voided if used with unapproved attachments.

Slope Operation

All slopes and ramps require extra caution. If you feel uneasy on a slope, **Do Not** mow it.

- Remove obstacles such as rocks, tree limbs, etc. from the mowing area.
- Watch for holes, ruts or bumps. Tall grass can hide obstacles.
- Use caution near drop-offs, ditches, or embankments. The machine could suddenly turn over if a wheel goes over the edge of a cliff or ditch, or if an edge caves in.
- Use extra care with grass catchers or other attachments. These can change the stability of the machine.
- Keep all movement on slopes slow and gradual. **Do Not** make sudden changes in speed or direction.
- Mow slopes side to side.
- **Do Not** mow slopes greater than 15 degrees.

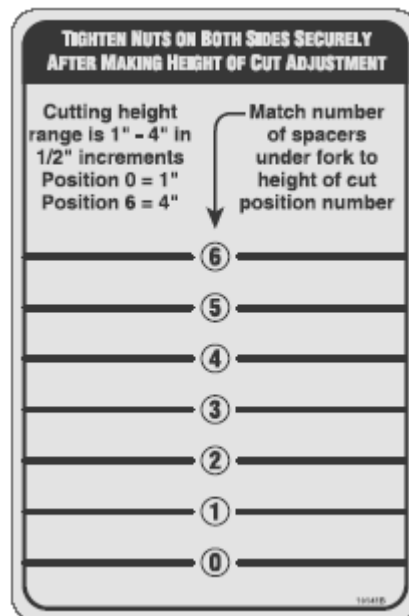
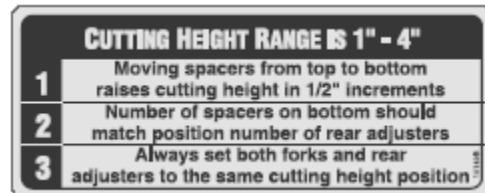
Service

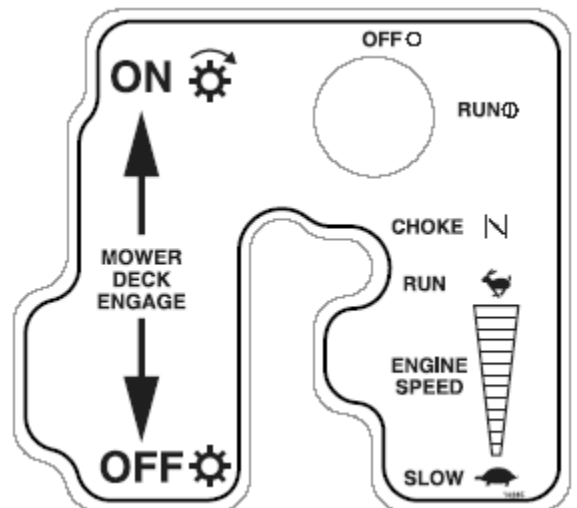
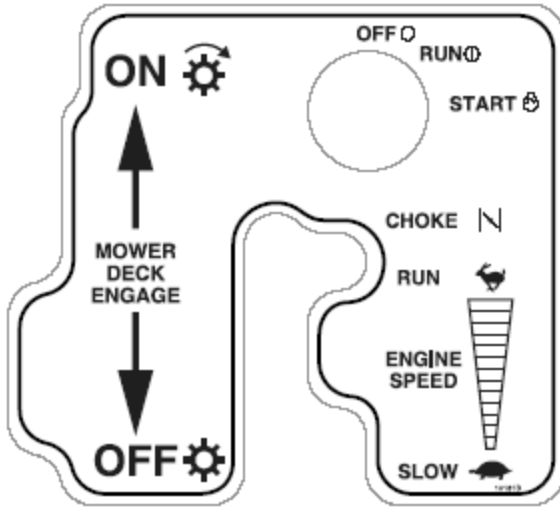
- **Never** store the machine or fuel container inside where there is an open flame, such as near a water heater or furnace.
- Keep nuts and bolts tight, especially the blade attachment bolts. Keep equipment in good condition.
- **Never** tamper with safety devices. Check safety systems for proper operation before each use.
- Understand service procedure before doing work. Keep the work area clean and dry.
- Engine exhaust fumes can cause sickness or death. **ONLY** start engine outdoors or in a well ventilated place.
- Keep cigarettes, sparks and open flames away from the fuel system and the battery.
- Always have an approved and fully charged fire extinguisher near your work area.
- Wear personal eye protection when using compressed air for cleaning purposes.
- **Never** lubricate, service or adjust mower while it is moving. Keep all safety devices in place and in working condition.
- Keep hardware tight.
- To prevent them from getting caught, keep hands, feet, clothing, jewelry and long hair away from any moving parts.
- Before servicing machine, disengage all power and stop the engine. Let engine cool.
- Securely support any machine elements that must be raised for service work.
- Keep all parts in good condition and properly installed. Fix damage immediately. Replace worn or broken parts. Remove any buildup of grease, oil or debris.
- Unauthorized modifications to the mower may impair its function and safety and will void any warranty.

Safety Decals

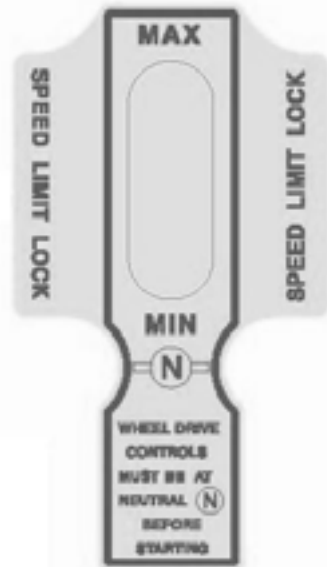


Safety decals and instructions are easily visible to the operator and are located near any area of potential danger. Replace any decal that is damaged or lost.





OPERATING INSTRUCTIONS		WARNING	
<p>IMPORTANT INFORMATION:</p> <p>READ AND UNDERSTAND OPERATING INSTRUCTIONS, SAFETY AND OIL LABELS, BEFORE USING. ALWAYS WEAR YOUR SAFETY BELT AND SEATBELT. ALWAYS WEAR YOUR SAFETY BELT AND SEATBELT. ALWAYS WEAR YOUR SAFETY BELT AND SEATBELT.</p> <p>STARTING INSTRUCTIONS:</p> <p>TURN KEY TO START POSITION AND HOLD UNTIL ENGINE STARTS. DO NOT TURN KEY TO OFF AND RESTART KEY. TURN KEY TO OFF AND RESTART KEY.</p> <p>TO STOP ENGINE:</p> <p>TURN KEY TO STOP POSITION. HOLD UNTIL ENGINE STOPPED. TURN KEY TO OFF. TURN KEY TO OFF AND RESTART KEY.</p> <p>SAFETY VALVE CONTROLS:</p> <p>PULL OUT SAFETY VALVE CONTROLS ON BACK OF SEAT. PULL OUT SAFETY VALVE CONTROLS ON BACK OF SEAT. PULL OUT SAFETY VALVE CONTROLS ON BACK OF SEAT.</p> <p>REARWARD DRIVING INSTRUCTIONS:</p> <p>PULL OUT REARWARD DRIVE CONTROL ON BACK OF SEAT. PULL OUT REARWARD DRIVE CONTROL ON BACK OF SEAT. PULL OUT REARWARD DRIVE CONTROL ON BACK OF SEAT.</p> <p>BE CAREFUL OF OBSTRUCTIONS:</p> <p>BE CAREFUL OF OBSTRUCTIONS. BE CAREFUL OF OBSTRUCTIONS. BE CAREFUL OF OBSTRUCTIONS.</p>	<p>IMPORTANT INFORMATION:</p> <p>READ AND UNDERSTAND OPERATING INSTRUCTIONS, SAFETY AND OIL LABELS, BEFORE USING. ALWAYS WEAR YOUR SAFETY BELT AND SEATBELT. ALWAYS WEAR YOUR SAFETY BELT AND SEATBELT. ALWAYS WEAR YOUR SAFETY BELT AND SEATBELT.</p> <p>STARTING INSTRUCTIONS:</p> <p>TURN KEY TO START POSITION AND HOLD UNTIL ENGINE STARTS. DO NOT TURN KEY TO OFF AND RESTART KEY. TURN KEY TO OFF AND RESTART KEY.</p> <p>TO STOP ENGINE:</p> <p>TURN KEY TO STOP POSITION. HOLD UNTIL ENGINE STOPPED. TURN KEY TO OFF. TURN KEY TO OFF AND RESTART KEY.</p> <p>SAFETY VALVE CONTROLS:</p> <p>PULL OUT SAFETY VALVE CONTROLS ON BACK OF SEAT. PULL OUT SAFETY VALVE CONTROLS ON BACK OF SEAT. PULL OUT SAFETY VALVE CONTROLS ON BACK OF SEAT.</p> <p>REARWARD DRIVING INSTRUCTIONS:</p> <p>PULL OUT REARWARD DRIVE CONTROL ON BACK OF SEAT. PULL OUT REARWARD DRIVE CONTROL ON BACK OF SEAT. PULL OUT REARWARD DRIVE CONTROL ON BACK OF SEAT.</p> <p>BE CAREFUL OF OBSTRUCTIONS:</p> <p>BE CAREFUL OF OBSTRUCTIONS. BE CAREFUL OF OBSTRUCTIONS. BE CAREFUL OF OBSTRUCTIONS.</p>	<p>CUTTING HAZARDS:</p> <p>DO NOT put hands or feet under or into mower while engine is running.</p> <p>THUNDERBOLT HAZARDS:</p> <p>DO NOT operate mower without discharge chute or other grass collector attached and in place.</p> <p>Keep all safety devices in place.</p> <p>Before starting mower: clear area of objects that may be thrown by blades.</p> <p>Read and understand owner's manual before operating machine.</p> <p>Keep people, especially children, at least 100 feet away from work area while machine is running. Chargeblade blades and stop engine if necessary approach.</p> <p>Never carry children, especially children, when machine is turned off.</p> <p>DO NOT ride in reverse.</p>	<p>Look down and behind before and while backing.</p> <p>Wear hearing and eye protection while operating machine.</p> <p>DO NOT allow persons under 16 years of age to operate.</p> <p>ALWAYS drive across slopes, set up and down.</p> <p>Avoid sudden turns.</p> <p>If machine stops going uphill, stop blades and back down slowly.</p> <p>Always shut off engine and remove spark plug wire before making adjustments to or working any part of machine.</p> <p>When backing machine, stop engine and remove key.</p> <p>FAILURE TO COMPLY TO ANY OF THE ABOVE COULD RESULT IN DEATH OR SERIOUS INJURY.</p>



<p>LH DUMP VALVE PULL OUT-PUSH DOWN TO RELEASE AXLE</p>	<p>PARKING BRAKE PULL OUT-PUSH DOWN TO LATCH</p>	<p>RH DUMP VALVE PULL OUT-PUSH DOWN TO RELEASE AXLE</p>
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Product Overview

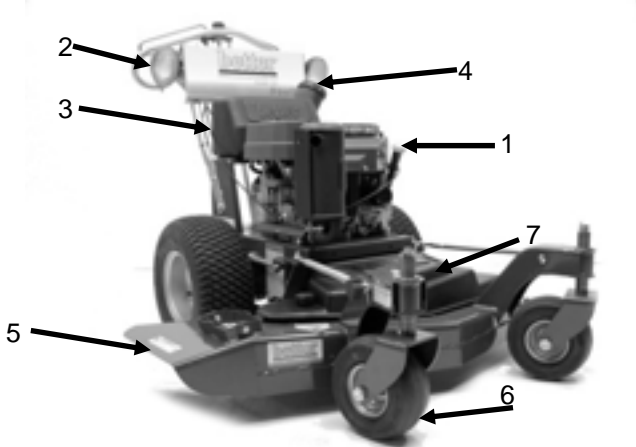


Figure 2

1. Oil dipstick
2. Headlights
3. Gas tank
4. Gas Cap
5. Side discharge chute
6. Front caster wheel
7. Belt Guard Cover

Controls

Become familiar with all the controls (**Figure 3**) before you start the engine and operate the machine.

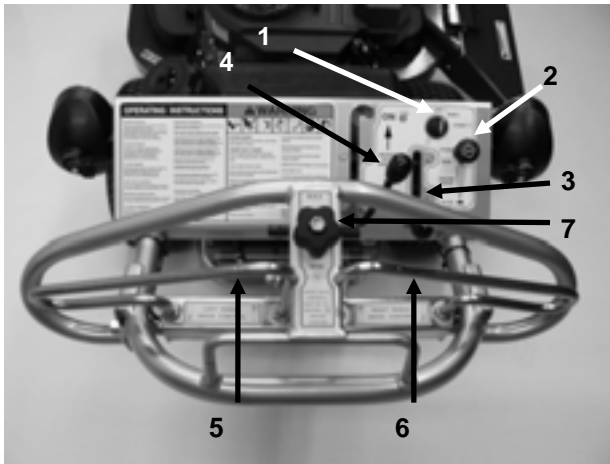


Figure 3

1. Ignition Switch
2. Manual Choke (if equipped)
3. Throttle
4. PTO Control
5. Left Motion Control Lever
6. Right Motion Control Lever
7. Speed Limit Lock

Ignition Switch

This switch is used to start the mower engine. Manual start engines have two positions: Run and Stop. Electric start engines have three positions: Start, Run and Stop.

Choke

Use the choke when starting a cold engine.

Throttle Control

The throttle controls engine RPM.

Blade Engagement Control (PTO)

The blade engagement control (PTO) is used to engage the drive for the mower blades. Move the lever up and to the right to engage the blades. To disengage the blades, move the blade control lever (PTO) down. The left side motion control lever must be depressed for blades to engage.

Motion Control Levers

The motion control levers are used to drive the machine forward, reverse and turn either direction.

Note: Determine the left and right sides of the machine from the normal operating position.

Speed Limit Lock

The speed limit lock is used to set the maximum forward speed the machine will travel. Loosen the locking knob and move forward to increase speed, move it back to decrease speed.

Fuel Shut-off Valve



Figure 4

Close the fuel shut-off valve (under the fuel tank) when transporting or storing the mower.

Hour Meter

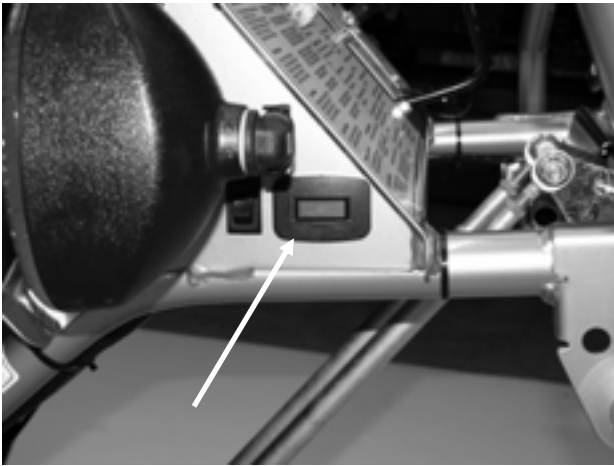


Figure 5

The hour meter shows the total hours the machine has been operated.

The hour meter runs anytime the key is in the on position.

Note: Check your hour meter to ensure that maintenance is done at all recommended intervals shown in the Recommended Maintenance Schedule.

Attachments/Accessories

A selection of Better Outdoor Products™ approved attachments and accessories are available for use with the machine to enhance and expand its capabilities. Contact Better Outdoor Products™ for information on approved accessories.

Parking Brake/Dump Valves

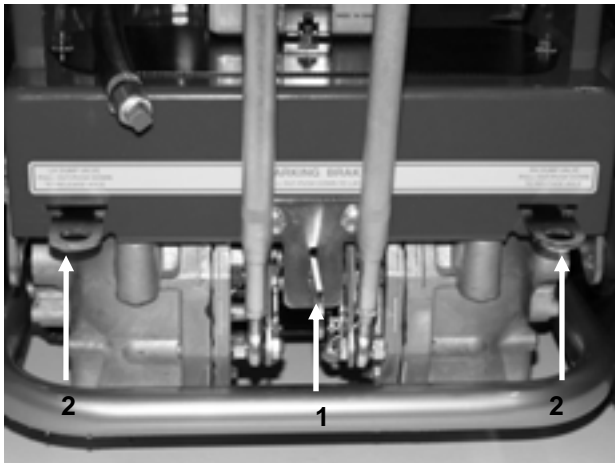


Figure 6

1. The parking brake is engaged by pulling the lever out and locking in place. It must be disengaged for machine to move.
2. The dump valves are located on either side of parking brake. They are engaged by pulling out and locking in place. This will allow the machine to be rolled around by hand.

Specifications

Note: Specifications and design are subject to change without notice.

36 inch mowers:

Width w/deflector up	39 ½ inches
Length	64 ½ inches
Height	44 inches
Weight	396-409 pounds

44 inch mowers:

Width w/deflector up	47 ½ inches
Length	66 ½ inches
Height	44 inches
Weight	431-445 pounds

Operation

Adding Fuel

Use Unleaded Regular Gasoline suitable for automotive use (85 octane minimum).

Important: Never use methanol, gasoline containing methanol, or gasohol containing more than 10% ethanol because the fuel system could be damaged. **Do Not** mix oil with gasoline.



In certain conditions, gasoline is extremely flammable and highly explosive. A fire or explosion from gasoline can burn you and others and can damage property.

- Fill the fuel tank outdoors, in an open area, when the engine is cold. Wipe up any gasoline that spills.
- **Never** fill the fuel tank inside an enclosed trailer.
- **Do Not** fill the fuel tank completely full. Add gasoline to the fuel tank until the level is 1/4 to 1/2 inch (6 to 13 mm) below the bottom of the filler neck. This empty space in the tank allows gasoline to expand.
- **Never** smoke when handling gasoline, and stay away from an open flame or where gasoline fumes may be ignited by a spark.
- Store gasoline in an approved container and keep it out of the reach of children. **Never** buy more than a 30-day supply of gasoline.
- **Do Not** operate without entire exhaust system in place and in proper working condition.

In certain conditions during fueling, static electricity can be released causing a spark which can ignite the gasoline vapors. A fire or explosion from gasoline can burn you and others and can damage property.

- Always place gasoline containers on the ground away from your vehicle before filling.
- **Do Not** fill gasoline containers inside a vehicle or on a truck or trailer bed because interior carpets or plastic truck bed liners may insulate the container and slow the loss of any static charge.
- When practical, remove gas-powered equipment from the truck or trailer and refuel the equipment with its wheels on the ground.
- If this is not possible, then refuel such equipment on a truck or trailer from a portable container, rather than from a gasoline dispenser nozzle.
- If a gasoline dispenser nozzle must be used, keep the nozzle in contact with the rim of the fuel tank or container opening at all times until fueling is complete.



Gasoline is harmful or fatal if swallowed. Long-term exposure to vapors can cause serious injury and illness.

- Avoid prolonged breathing of vapors.
- Keep face away from nozzle and gas tank or container opening.
- Keep gas away from eyes and skin.

Using Stabilizer/Conditioner

Use a fuel stabilizer/conditioner in the machine to provide the following benefits:

- Keeps gasoline fresh during storage of 90 days or less. For longer storage, it is recommended that the fuel tank be drained.
- Cleans the engine while it runs
- Eliminates gum-like varnish buildup in the fuel system, which causes hard starting

Important: Do Not use fuel additives containing methanol or ethanol.

Add the correct amount of gas stabilizer/conditioner to the gas.

Note: A fuel stabilizer/conditioner is most effective when mixed with fresh gasoline. To minimize the chance of varnish deposits in the fuel system, use fuel stabilizer at all times.

Filling the Fuel Tank

Shut the engine off.

Clean around fuel tank cap and remove the cap.

Add unleaded regular gasoline to fuel tank, until the level is 1/4 to 1/2 inch (6 to 13 mm) below the bottom of the filler neck. This space in the tank allows gasoline to expand. **Do Not** fill the fuel tank completely full.

Install fuel tank cap securely. Wipe up any gasoline that may have spilled.

Checking the Engine Oil Level

Before you start the engine and use the machine, check the oil level in the engine crankcase; refer to Checking Oil Level in Engine Maintenance.

Think Safety First

Carefully read all the safety instructions and decals in the safety section. Knowing this information could help you or any bystanders avoid injury. The use of protective equipment for eyes, hearing, feet and head is recommended.



This machine produces sound levels in excess of 85 dBA at the operator's ear and can cause hearing loss through extended periods of exposure. Wear hearing protection when operating this machine.

Starting the Engine

1. Connect the wire(s) to the spark plug(s).
2. Open the fuel valve.
3. Lock both motion control levers in neutral.
4. Move the throttle control to run and pull the choke knob to the on position before starting a cold engine. (The Ninja's choke position is just above the Run position.)

Note: A warm or hot engine may not require choking. To start a warm engine, move throttle control midway between the run and slow positions. Turn the ignition key to the start position to energize the starter. When the engine starts, release the key.

Note: Do Not engage the starter for more than 5 seconds at a time. If the engine fails to start, allow for a 15 second cool-down period between attempts. Failure to follow these instructions can burn out the starter motor.

When engine starts, move the throttle control between the run and slow position. On electric start models push the choke lever to the off position. Allow the engine to warm up and then move the throttle control to the run position.

Stopping the Engine

Move the motion control levers to the neutral position.

Move the throttle lever to slow.

If the engine has been working hard or is hot, let the engine idle for 30 to 60 seconds before turning the engine off.

To stop the engine, turn the ignition key to Off.

Important: Make sure fuel shut off valve is closed before transporting or storing the machine, as fuel leakage may occur. Before storing the machine, pull the wire off spark plug(s) to prevent possibility of accidental starting.

Moving Forward or Backward

The throttle control regulates the engine speed as measured in rpm (revolutions per minute). Place the throttle control in the Run position for best performance. Always operate in the full throttle position when mowing.



- Machine can spin very rapidly. Operator may lose control of machine and cause personal injury or damage to machine.
- Use caution when making turns.
- Slow the machine down before making sharp turns.

Moving Forward

1. Release the parking brake; refer to Releasing the Parking Brake in Operation.
2. To go forward, slowly push the motion control levers forward.
3. To go straight, apply equal pressure to both motion control levers.
4. To turn, move the motion control lever toward neutral in the direction you want to turn. The more you move the motion control levers in either direction, the faster the machine will move in that direction.
5. To stop, pull the motion control levers back to the neutral position.

Note: Always be sure to release the parking brake before engaging motion control levers.

Moving Backward

1. To go backward, slowly pull the motion control levers rearward.
2. To go straight, apply equal pressure to both motion control levers.
3. To turn, release pressure on the motion control lever toward the direction you want to turn.
4. To stop, push the motion control levers to the neutral position.

Stopping the Machine

To stop the machine, move the motion control levers to the neutral position, disengage the blade engagement control lever (PTO), and turn the ignition key to Off. Engage parking brake. Remember to remove the key from the ignition switch.



Children or bystanders may be injured if they move or attempt to operate the mower while it is unattended.

Always remove the ignition key and set the parking brake when leaving the machine unattended, even if just for a few minutes.

Pushing the Machine by Hand

The machine can be pushed by hand without the engine running if:

1. The dump valves are pulled and locked in the by-pass position.
2. The parking brake lever is released.

Important: Always push the machine by hand.

Never tow the machine with another vehicle. Hydraulic damage may occur.

Side Discharging or Mulching the Grass

This mower has a hinged grass deflector that disperses clippings to the side and down toward the turf.

Without the grass deflector, discharge cover, or complete grass catcher assembly mounted in place, you and others are exposed to blade contact and thrown debris. Contact with rotating

mower blade(s) and thrown debris can cause injury or death.

- **Never** remove the grass deflector from the mower because the grass deflector routes material down toward the turf. If the grass deflector is ever damaged, replace it immediately.
- **Never** put your hands or feet under the mower.
- **Never** try to clear discharge area or mower blades unless the blade engagement control lever (PTO) is off and the ignition key is off. Also remove the key and pull the wire(s) off the spark plug(s).

Operating the Deck Engagement Control (PTO)

The deck engagement control (PTO) is used in conjunction with the Safety Interlock System to engage and disengage the mower blades.

Engaging the Mower Blades (PTO)

1. To engage the mower blades, depress the left side motion control lever.
2. Place the throttle control lever between Run and Slow position.
3. Move the deck engagement control lever (PTO) up and to the right while holding down the left side motion control lever.
4. Move throttle control lever to Run position.

Disengaging the Mower Blades (PTO)

Move the deck engagement control lever (PTO) up and to the left, then down to the Off position.

The Safety Interlock System



If safety interlock switches are disconnected or damaged, the machine could operate unexpectedly causing personal injury.

- **Do Not** tamper with the interlock switches.
- Check the operation of the interlock switches daily and replace any damaged switches before operating the machine.

Understanding the Safety Interlock Systems

The safety interlock system is designed to prevent the mower blades from rotating unless:

- The left motion control lever is pressed down.
- The blade engagement control lever (PTO) is moved to the On position.

The safety interlock system is designed to stop the engine if you release the left motion control lever with the mower blades engaged.

The safety interlock system is designed not to allow the engine to start unless the right motion control lever is in the neutral position.

Testing the Safety Interlock System

Test the safety interlock system by testing the wheel drive and blade drive systems before you use the machine each time.

Wheel Drive System

Hold the right side motion control lever forward and try to start engine. The engine should not start.

Blade Drive System

Start the engine.

Depress the left side motion control lever.

Continue holding the left side motion control lever in the depressed position and move the blade engagement control lever (PTO) to the ON position. The clutch should engage and the mower blades should begin rotating.

Release the left side motion control lever. The engine should stop and blades should stop rotating.

Note: If the safety system does not operate as described above, contact Better Outdoor Products™ immediately.

Quick™ Adjustments

Height of Cut

1. Support front of deck with a jack stand **Figure 7**.



Figure 7

2. Remove twist pin (10800) from the top of caster fork **Figure 8**.

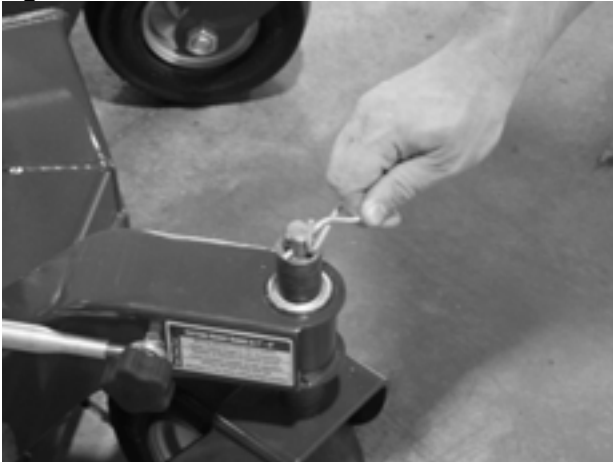


Figure 8

3. Remove HOC spacers (10004) and slide caster fork out **Figure 9**.



Figure 9

4. Add/remove spacers to the bottom side of the fork for desired height of cut. **See table below.**
5. Install in reverse order and repeat on other fork.
6. Using a 3/4" socket, loosen the nut 1-1/2 to 2 full turns for the rear height of cut adjustment on both sides **Figure 10**.



Figure 10

7. Pull up or push down on the rear of the deck to align the arrow on the rear adjusters so that they both point to the number position that matches your caster fork setting and retighten nuts.
8. The height-of-cut can be adjusted from 1 to 4 inches (25 to 100 mm).

Note: Machines leave the factory set at 2-1/2 inches.

Grass Height	Front Casters	Rear Adjustment
1 inch	0 spacers	0
1 ½ inches	1 spacer	1
2 inches	2 spacers	2
2 ½ inches	3 spacers	3
3 inches	4 spacers	4
3 ½ inches	5 spacers	5
4 inches	6 spacers	6

Belt Guard Cover

1. Remove caster arm reinforcement strut knobs and rotate struts to the side **Figure 11**.

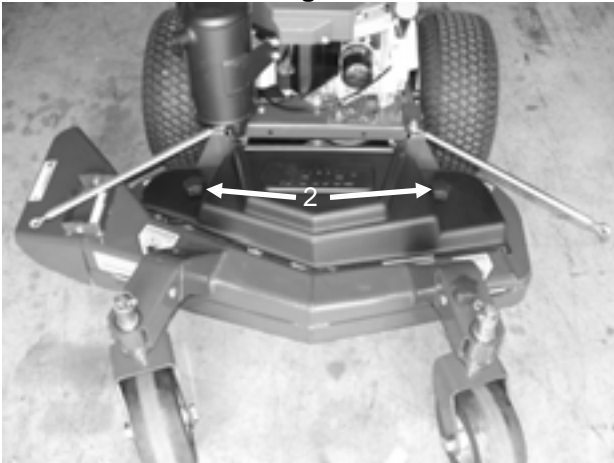


Figure 11

2. Remove belt cover knobs and remove cover.
3. Reinstall in reverse order.

Wheel Tracking

The wheel tracking can be adjusted so that the machine will travel straight. **Note:** Proper tire inflation is important for the machine to track properly (refer to Tire Maintenance).

1. Using a 9/16" wrench, loosen the jam nuts on the top and bottom of the hydro control rod **Figure 12**.



Figure 12

2. Turn the appropriate rod to adjust the travel of the motion control lever **Figure 13**.



Figure 13

3. Tighten jam nuts.

Maintenance

Servicing the Engine Oil

Check the engine oil level daily when in use.

Change the engine oil as follows:

- After the first 8 operating hours
- After every 50 operating hours

Note: Change the oil more frequently when the operating conditions are extremely dusty or sandy.

Oil Type: Detergent oil (API service SF, SG, SH, or SJ)

Note: Using multi grade oils (5W-20, 10W-30 and 10W-40) will increase oil consumption and **IS NOT** recommended. Check oil level more frequently when using them.

Kawasaki Crankcase Capacity: 58 ounces (1.7 liter) with the filter removed; 51 ounces (1.5 liter) without the filter removed. Refer to the table **Figure 14**.

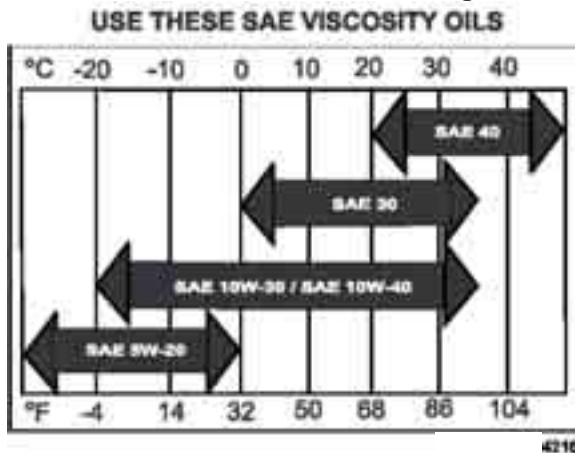


Figure 14

Checking the Engine Oil Level

1. Park the machine on a level surface.
2. Disengage the PTO.
3. Stop the engine, remove the key, and wait for all moving parts to stop before leaving the operating position.
4. Clean around the oil dipstick (**Figure 15**) so that dirt cannot fall into the filler hole and damage the engine.

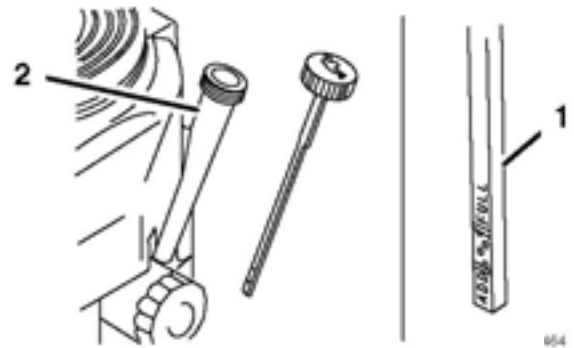


Figure 15

1. Oil dipstick
2. Filler tube

5. Unscrew the oil dipstick and wipe the end clean **Figure 15**.
6. Slide the oil dipstick fully into the filler tube, but do not thread onto tube.
7. Pull the dipstick out and look at the end. If the oil level is low, slowly pour only enough oil into the filler tube to raise the level to the Full mark.
Important: Do Not overfill the crankcase with oil and run the engine; engine damage can result.

Changing the Oil (50hrs)

1. Start the engine and let it run five minutes. This warms the oil so it drains better.
2. Park the machine so that the rear of the machine is slightly lower to assure the oil drains completely.
3. Disengage the PTO.
4. Stop the engine, remove the key, and wait for all moving parts to stop before leaving the operating position.
5. Place a pan below the drain hose. Remove oil drain plug to allow oil to drain **Figure 16**.
6. When oil has drained completely, reinstall the drain plug.



Figure 16

Note: Dispose of the used oil at a recycling center.

Slowly pour approximately 80% of the specified oil into the filler tube.
Check the oil level; refer to Checking the Engine Oil Level.
Slowly add the additional oil to bring it to the Full mark.

Changing the Oil Filter (100hrs)

Replace the oil filter every 100 operating hours or every other oil change.

	<u>OEM</u>	<u>WIX</u>	<u>FRAM</u>	<u>NAPA</u>
Kawasaki	49065	51394	PH4967	1394 1056

Note: Change the oil filter more frequently when the operating conditions are extremely dusty or sandy.

1. Drain the oil from the engine; refer to Changing the Engine Oil.
2. Remove the old filter **Figure 17**.

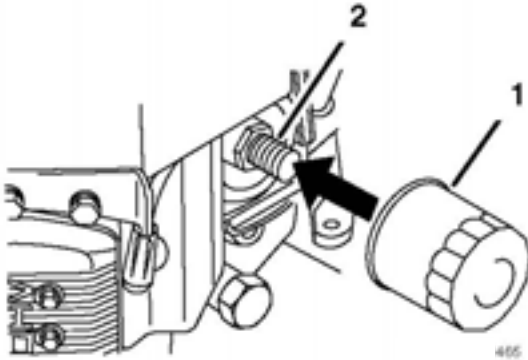


Figure 17

1. Oil filter 2. Adapter

3. Apply a thin coat of new oil to the rubber gasket on the replacement filter. Install the replacement oil filter to the filter adapter, turn the oil filter clockwise until the rubber gasket contacts the filter adapter, then tighten the filter an additional 3/4 turn **Figure 17**.
4. Fill the crankcase with the proper type of new oil; refer to Servicing the Engine Oil.
Run the engine for about 3 minutes, stop the engine, and check for oil leaks around the oil filter and drain valve.
Check the engine oil level and add oil if needed.
Wipe up any spilled oil.

Servicing the Spark Plug(s) (100hrs)

Check the spark plug(s) after every 100 operating hours.

Ensure that the air gap between the center and side electrode is correct before installing the spark plug. Use a spark plug wrench for removing and installing the spark plug(s) and a gapping tool/feeler gauge to check and adjust the air gap. Install new spark plug(s) if necessary.

Type: Champion® RCJ8Y or equivalent
Air Gap: 0.030 inch (0.75 mm)

Removing the Spark Plug(s)

Disengage the PTO.

Stop the engine, remove the key, and wait for all moving parts to stop before leaving the operating position.

Disconnect the wire(s) from the spark plug(s) **Figure 18**.

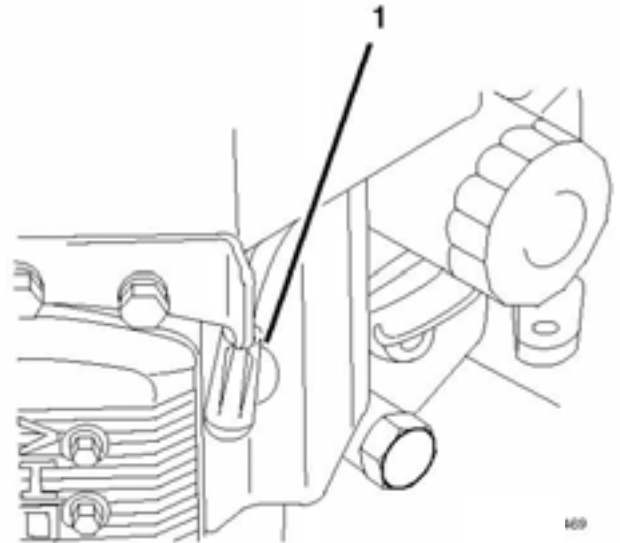


Figure 18

1. Spark-plug wire/spark plug

Clean around the spark plug(s) to prevent dirt from falling into the engine and potentially causing damage.

Using a spark plug wrench, remove the spark plug(s) and the metal washers.

Checking the Spark Plug(s)

Look at the center of the spark plug(s) **Figure 19**. If you see light brown or gray on the insulator, the engine is operating properly. A black coating on the insulator usually means that the air cleaner is dirty or other rich condition.

If needed, clean the spark plug(s) with a wire brush to remove carbon deposits.

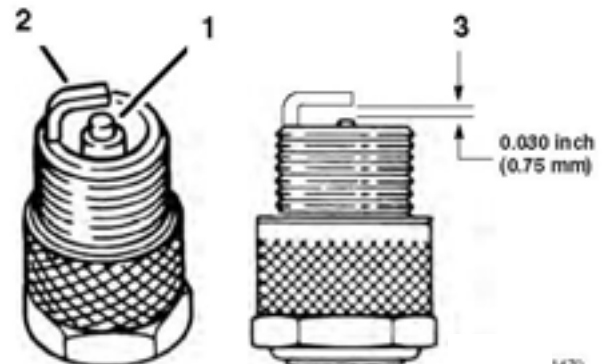


Figure 19

1. Center electrode insulator
2. Side electrode
3. Air gap (not to scale)

Important: Always replace a spark plug(s) when it has a worn electrode, an oily film, or cracks in the porcelain.

Check the gap between the center and side electrode (**Figure 19**). Bend the side electrode (**Figure 19**) if the gap is not correct.

Installing the Spark Plug(s)

Install the spark plug(s) and the metal washer(s). Ensure that the air gap is set correctly. Tighten the spark plug(s) to 16 ft-lb (22 N-m). Connect the wire(s) to the spark plug(s) **Figure 18**.

Air Cleaner Foam and Paper Element (25-50hrs.)

1. Refer to your Kawasaki Owner's Manual for removal and maintenance procedure.
Foam element: Clean after every 25 operating hours.

Paper element: Check after every 50 operating hours. Replace after every 200 operating hours or yearly, whichever comes first.

Inspect the foam and paper elements and replace them if they are damaged or excessively dirty.

Note: Service the air cleaner more frequently (every few operating hours) if the operating conditions are extremely dusty or sandy.

Important: Do Not oil the foam or paper element.



In certain conditions, gasoline is extremely flammable and highly explosive. A fire or explosion from gasoline can burn you and others and can damage property.

- Drain gasoline from the fuel tank when the engine is cold. Do this outdoors in an open area. Wipe up any gasoline that spills.

- **Never** smoke when draining gasoline, and stay away from an open flame or where a spark may ignite the gasoline fumes.

Fuel Filter (200 hrs.)

1. Turn gas tank valve to Off position **Figure 20**.

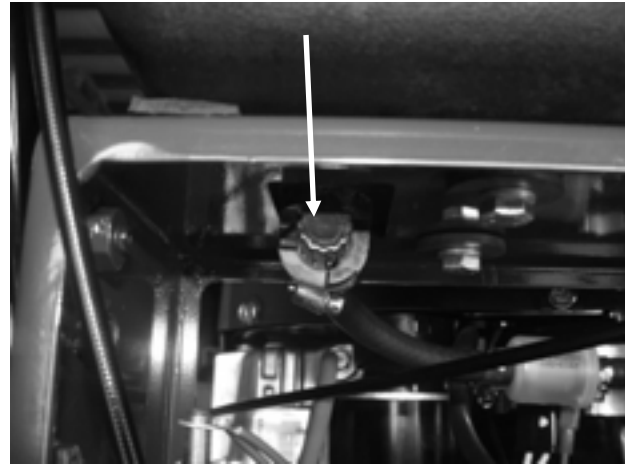


Figure 20

1. Using a straight screwdriver/pliers, loosen clamps **Figure 21**.

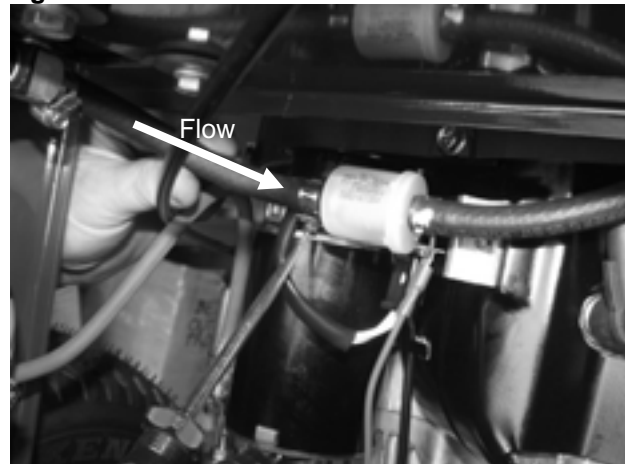


Figure 21

2. Remove hoses from filter.
 3. Reinstall in reverse order.
- Note:** Check filter for direction of flow arrow.

Cooling System Maintenance

Clean the air intake screen before each use. Remove any build-up of grass, dirt or other debris from the cylinder and cylinder head cooling fins, air intake screen on flywheel end, and carburetor-governor levers and linkage. This will help insure adequate cooling and correct engine speed and will reduce the possibility of overheating and mechanical damage to the engine.

Grease Fittings (25 hrs.)

Note: Always wipe off any dirt/debris from grease fittings before servicing.

1. Remove ignition key.
2. Remove belt guard cover (refer to Belt Guard Cover).
3. Using a grease gun, put 3 to 4 pumps of red high temperature grease into each spindle fitting.
4. Put ½ pump of grease into each idler arm fitting. **Figure 22, 22a, 22b.**



Figure 22



Figure 22a



Figure 22b

1. Put 3 to 4 pumps of grease into each of the front caster wheels **Figure 23**.



Figure 23

Caster Fork (25 hrs.)

1. Remove caster forks (refer to height of cut adjustment).
2. Using a fine grit sandpaper, clean any rust or dirt from caster fork shafts and caster bearings.
3. Using a light lubricant (WD-40™), lubricate clean shafts.
4. Reinstall.

Clutch (25hrs.)

1. Spray a small amount of light lubricating oil (WD-40™) into the opening next to clutch lever **Figure 24**.



Figure 24

Tires (25 hrs.)

1. Using a tire pressure gage, maintain 14 to 16 psi for rear wheels.
2. Using a tire pressure gage, maintain 25 to 30 psi for front caster wheels.

EZT Hydro

Better Outdoor Products™ uses Hydro-Gear's newest EZT line of sealed pump/motors utilizing one inch axles and a four lug pattern for easy mounting of wheel assembly. These units were developed for riding zero turn mowers and provide extreme durability in this application. They require no periodic maintenance.

Battery

Maintenance free.

Blade Inspection (8hrs)

Inspect the blades every 8 hours.

1. Park the machine on a level surface, disengage the blades.
2. Turn the ignition key to Off.
3. Remove the key and disconnect the spark plug wire(s) from the spark plug(s).
4. Support the front of deck with a jack stand.
5. Inspect the cutting edges (**item 1 Figure 25**). If the edges are not sharp or have nicks, remove and sharpen the blades.
6. Inspect the blades, especially the curved area (**Figure 25**). If you notice any cracks, wear, or a slot forming in this area (**item 3 & 4 Figure 25**), discard and immediately install a new blade.

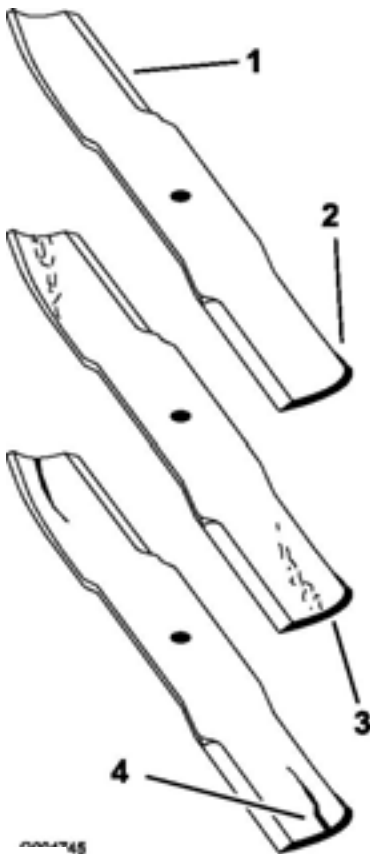


Figure 25

Troubleshooting

Problem	Possible Cause	Corrective Action
Engine will not start, starts hard, or fails to keep running.	<ol style="list-style-type: none"> 1. Fuel tank is empty. 2. Choke is not on. 3. Air cleaner is dirty. 4. Spark plug wire is loose or disconnected. 5. Spark plug is pitted, fouled, or the gap is incorrect. 6. Dirt in the fuel filter. 7. Dirt, water, or stale fuel is in the fuel system. 8. The motion control levers are not locked into the neutral position. 9. Weak battery. 	<ol style="list-style-type: none"> 1. Fill fuel tank with gasoline. 2. Move the choke lever to choke position. 3. Service the air cleaner element. 4. Install wire on spark plug. 5. Install a new, correctly gapped spark plug. 6. Replace the fuel filter. 7. Drain and clean fuel system. 8. Move motion control levers to the neutral position. 9. Service/charge battery.
Engine loses power.	<ol style="list-style-type: none"> 1. Engine load is excessive. 2. Air cleaner is dirty. 3. Oil level in the crankcase is low. 4. Cooling fins and air passages under the engine blower housing are plugged. 5. Spark plug is pitted, fouled, or the gap is incorrect. 6. Vent hole in the fuel cap is plugged. 7. Dirt in the fuel filter. 8. Dirt, water, or stale fuel is in the fuel system. 	<ol style="list-style-type: none"> 1. Reduce the ground speed. 2. Service the air cleaner. 3. Add oil to the crankcase. 4. Remove the obstruction from the cooling fins and air passages. 5. Install a new, correctly gapped spark plug. 6. Clean or replace the fuel cap. 7. Replace the fuel filter. 8. Drain and clean fuel system.
Engine overheats.	<ol style="list-style-type: none"> 1. Engine load is excessive. 2. Oil level in the crankcase is low. 3. Cooling fins and air passages under the engine blower housing are plugged. 	<ol style="list-style-type: none"> 1. Reduce the ground speed. 2. Add oil to the crankcase. 3. Remove the obstruction from the cooling fins and air passages.
Machine does not drive or moves slowly.	<ol style="list-style-type: none"> 1. Parking brake is engaged. 2. Dump valves are engaged. 3. Transaxle drive belt slipping. 4. Transaxle drive belt idler spring missing. 	<ol style="list-style-type: none"> 1. Disengage parking brake. 2. Disengage dump valves. 3. Replace the transaxle drive belt. 4. Replace the transaxle drive belt idler spring.
Abnormal vibration.	<ol style="list-style-type: none"> 1. Cutting blade(s) is/are bent or unbalanced. 2. Blade mounting bolt is loose. 3. Engine mounting bolts are loose. 4. Loose idler pulley or blade pulley. 5. Blade spindle is bent. 	<ol style="list-style-type: none"> 1. Install new cutting blade(s). 2. Tighten the blade mounting bolt. 3. Tighten the engine mounting bolts. 4. Tighten the appropriate pulley. 5. Replace spindle.
Uneven cutting height.	<ol style="list-style-type: none"> 1. Blade(s) not sharp. 2. Cutting blade(s) is/are bent. 3. Mower is not level. 4. Mower pitch is wrong. 5. Underside of mower is dirty. 6. Tire pressure is not correct. 7. Blade spindle bent. 	<ol style="list-style-type: none"> 1. Sharpen the blade(s). 2. Install new cutting blade(s). 3. Level the mower side-to-side. 4. Adjust the front-to-rear pitch. 5. Clean the underside of the mower. 6. Adjust the tire pressure. 7. Replace spindle.

Repair



Before replacing any part, ALWAYS remove battery ground cables and insulate terminals.

Ignition Switch

Electric Start (10286)

Manual Start (10333)

1. Remove ignition key.
2. Using a 7/8" open end wrench, remove the nylon ignition switch nut (10501).
3. Reach under dash panel and pull ignition switch out **Figure 26**.

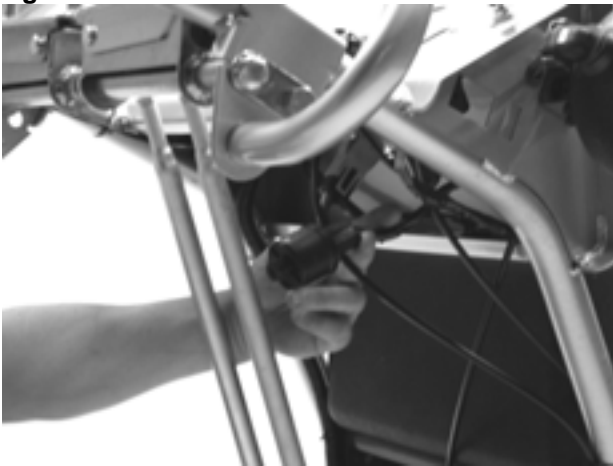


Figure 26

4. Unplug ignition switch from wiring harness.
5. Install new switch in reverse order.

Blade Engagement Interlock Switch (10081)

1. This switch is included as a component of the blade engagement control cable.
2. Please refer to Blade Engagement control replacement.

Battery (10799)

All Quick Dually™ mowers are equipped with the latest assembled glass mat maintenance free battery.



Battery terminals or metal tools could short against metal machine components causing sparks. Sparks can cause the battery gasses to explode, resulting in personal injury.

• When removing or installing the battery, **Do Not** allow the battery terminals to touch any metal parts of the machine.

• **Do Not** allow metal tools to short between the battery terminals and metal parts of the machine. Incorrect battery cable routing could damage the machine and cables causing sparks. Sparks can cause the battery gasses to explode, resulting in personal injury.

• Always Disconnect the negative (black) battery cable before disconnecting the positive (red) cable.
• Always Reconnect the positive (red) battery cable before reconnecting the negative (black) cable.

1. Remove ignition switch key.
2. Using a 1/2" wrench, remove the keps nut and remove the black ground cable and insulate end of cable **Figure 27**.

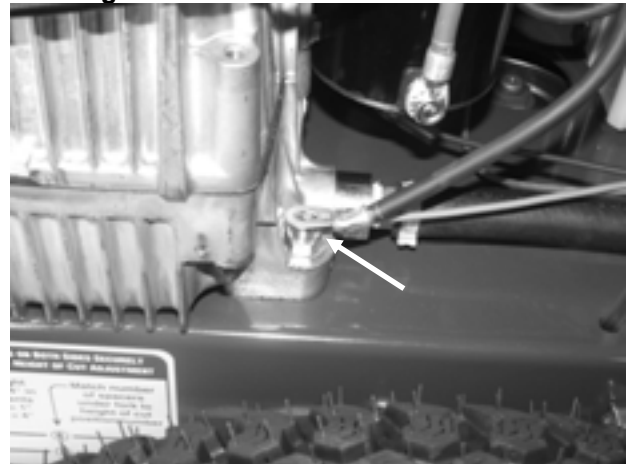


Figure 27

3. Using a 1/2" wrench, remove the keps nut from top of starter solenoid and remove red cable **Figure 28**.



Figure 28

4. Using a 1/2" wrench and socket, remove the keps nut holding battery clamp **Figure 29**.

**Figure 29**

5. Carefully remove battery, making sure cables **Do Not** touch any metal surface.
6. Install new battery in reverse order.
Note: If your Quick Dually™ mower is going to be stored, we recommend using our “Smart” Charger (10697).



Charging the battery produces gasses that can explode.

Never smoke near the battery and keep sparks and flames away from battery.

Starter Solenoid (10127)

1. Remove battery. Refer to Battery Replacement.
2. Using a 3/8" wrench, remove the white trigger wire.
3. Using a 1/2" wrench, remove the starter cable located on the bottom of starter solenoid **Figure 30**.

**Figure 30**

4. Using a Phillips screwdriver and 7/16" wrench, remove solenoid **Figure 31**.

**Figure 31**

5. Install new solenoid in reverse order.
Note: Make sure to re-attach the green ground wire behind the solenoid mounting bolt.

Fuse

1. All electric start Quick Dually™ mowers are equipped with an automotive type 10-amp fuse that is located near the top of starter solenoid.

Hour Meter (10220)

1. Unplug harness from hour meter.
2. Squeeze tabs and push out hour meter.
3. Install new meter in reverse order.
Note: The single green wire plug(s) into the top horizontal pin. To view full wiring schematics, refer to Wiring Schematics.



Motion Control Interlock Switch

1. Remove the hairpin cotter **Figure 32**.

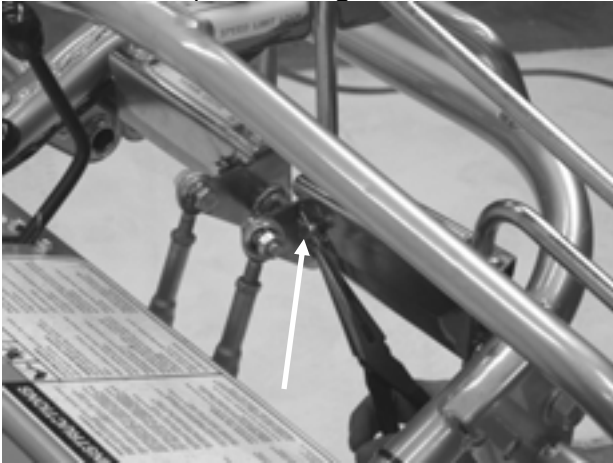


Figure 32

2. Remove the clevis pin **Figure 33**.



Figure 33

3. Remove motion control lever.
4. Remove the interlock switch by pressing the tabs in through the holes in the base of hydro control **Figure 33**.



Figure 33

5. Replace switch and install in reverse order.

Blade Engagement Control Cable (10081)

1. Disconnect the wiring plug from the safety switch under the PTO control **Figure 34**.



Figure 34

2. Remove PTO knob by turning counter clockwise.
3. Using a 3/8" wrench, remove the 4 mounting screws **Figure 35**.



Figure 35

4. Remove the belt guard cover (refer to Belt Guard Cover).
5. Remove cotter pin and release cable from bracket **Figure 36**.

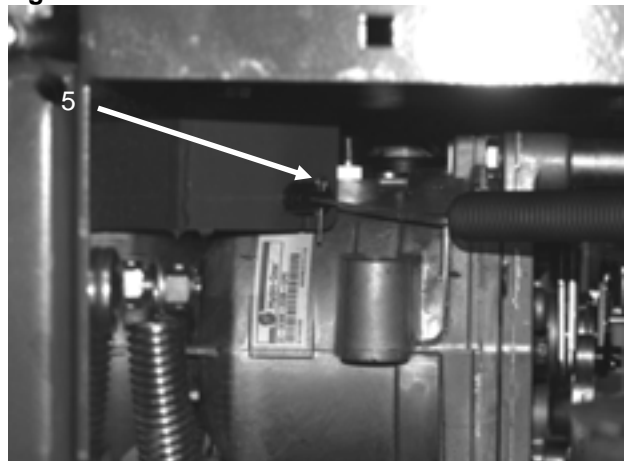


Figure 36

6. Disconnect the spring from the clutch engagement arm **Figure 37**.

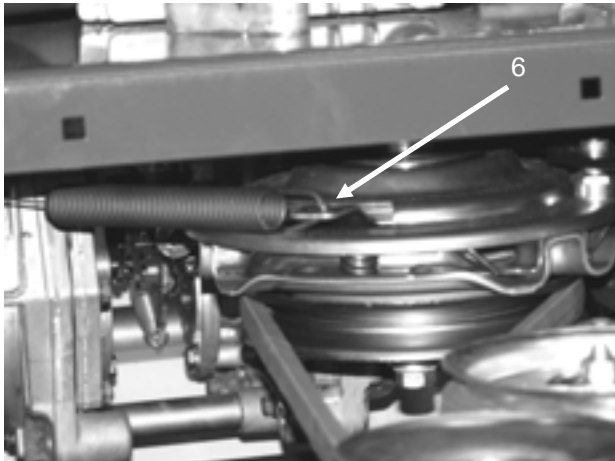


Figure 37

7. Cut any cable ties and remove cable assembly.
 8. Install new cable in reverse order.
- Note:** After assembly, test control to ensure clutch releases fully.

Throttle Cable (10439) Kawasaki

1. Using a 5/16" socket, loosen the cable clamp and remove cable end **Figure 38**.

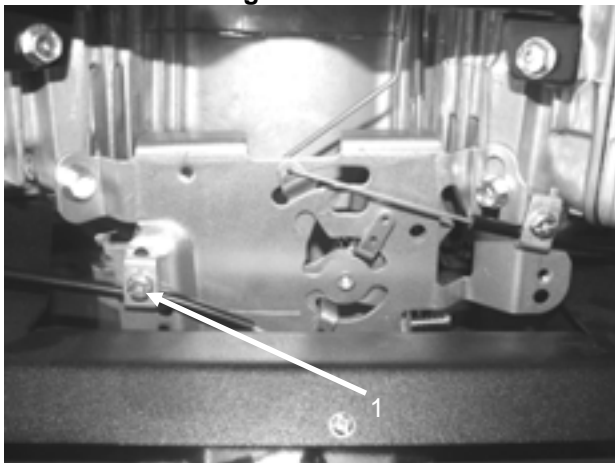


Figure 38

2. Unscrew throttle control knob counter-clockwise.
3. Using a 3/8" wrench and 5/16" socket, remove the throttle control bracket from dash panel **Figure 39**.



Figure 39

4. Cut any cable ties and remove cable. Install in reverse order.

Choke Cable (10440) Electric Start

1. Using a 5/16 socket, loosen cable clamp end **Figure 40**.

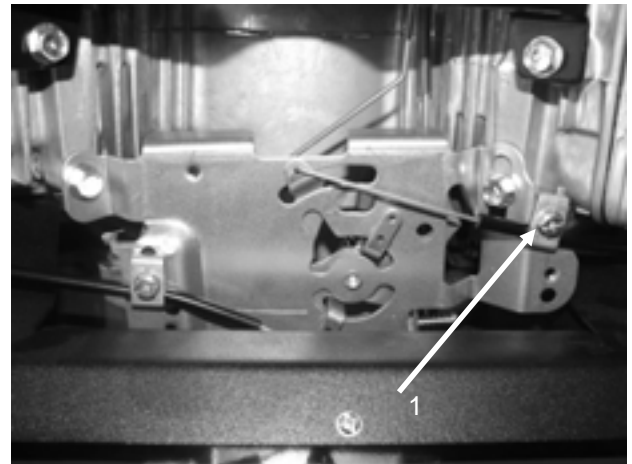


Figure 40

2. Using two 9/16" wrenches, unscrew cable jam nut **Figure 41**.



Figure 41

3. Cut any cable ties and remove cable. Install in reverse order.

Note: Install cable tie to secure choke cable to

battery bracket to ensure cable does not come into contact with positive battery post.

Deck Drive Belt (BOP 10596 Gates 6945) 36"

Models (BOP 10476 Gates 6951) 44" Models

1. Remove the belt guard cover (refer to Belt Guard Cover).
2. Rotate the large idler arm to the side and roll the belt off the idler pulley **Figure 42**.



Figure 42

3. Remove the belt from the center pulley and from the clutch.
4. Install new belt in reverse, order making sure that it seats in both pulleys.

Note: After replacing your belts, take time to grease your spindles and idlers with a good high temp grease!

Deck Belt (BOP 10047 Gates 6868) 36" Models

(BOP 10475 Gates 6882) 44" Models

1. Remove the belt guard cover (refer to Belt Guard Cover.)
2. Remove the deck drive belt (refer to Deck Drive Belt).
3. Start from either side and roll the belt off the pulley **Figure 43**.



Figure 43

4. Work the belt out of all pulleys and remove.

5. Install new belt in reverse order making sure that it seats in all pulleys.

Note: There is a decal on 36" and 44" decks that shows belt routing.

Note: After replacing your belts, take time to grease your spindles and idlers with a good high temp grease!

Hydro Drive Belt (BOP 10706 Gates 6831) All

Models

1. Remove battery (refer to Battery Replacement).
2. Using a 1/2" wrench, remove hydro access plate **Figure 44**.

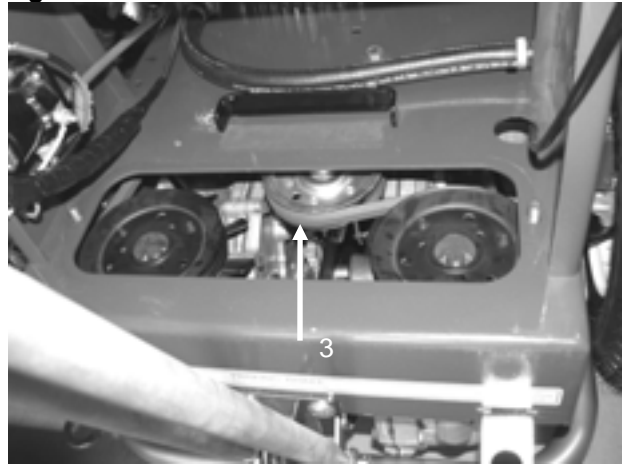


Figure 44

3. Push the idler forward and work the belt off of hydro pulleys **Figure 44**.
4. Remove the belt guard cover (refer to Belt Guard Cover).
5. Remove the deck drive belt (refer to Deck Drive Belt).
6. Using a 3/4" socket, remove the HOC bolt on the left side of machine.
7. Using two 9/16" wrenches, loosen the stud bolt enough to rotate the anti-rotation bracket off the clutch **Figure 45**.

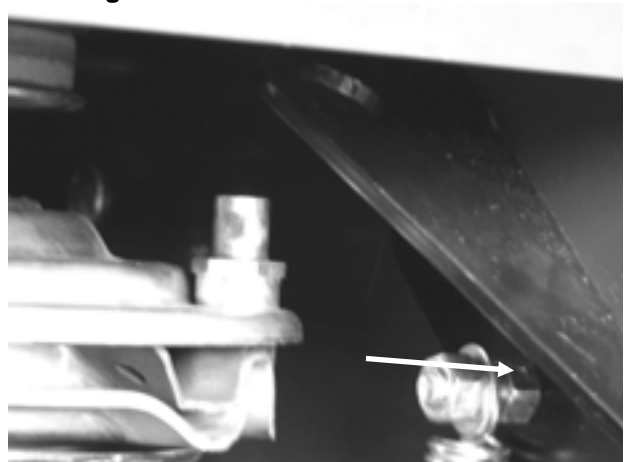


Figure 45

8. Disconnect the spring from the clutch engagement arm (refer to Blade Engagement Control Replacement).

9. Slip belt off clutch and remove.
10. Install the new belt in reverse order making sure that it seats in all pulleys.

Multi Disc Clutch (10579)

1. Remove deck drive belt (refer to Deck Drive Belt).
2. Lower mower deck to lowest position.
3. Remove hydro drive belt (refer to Hydro Drive Belt).
4. Using a small pipe wrench and ratchet with a 5/8" socket, remove the clutch bolt **Figure 46**.



Figure 46

Note: Clutch bolt can be removed through the hole in the swing arm.

5. Remove clutch.
 6. When installing new clutch, make sure the anti-rotation stud is inserted into the anti-rotation bracket.
- Note:** Use high strength (Red) Loctite™ on the threads of the clutch bolt when installing.

Spindle (10323)

1. Support front of machine with jack stand **Figure 47**.



Figure 47

2. Secure blades so that they will not spin, and remove blade **Figure 48**.

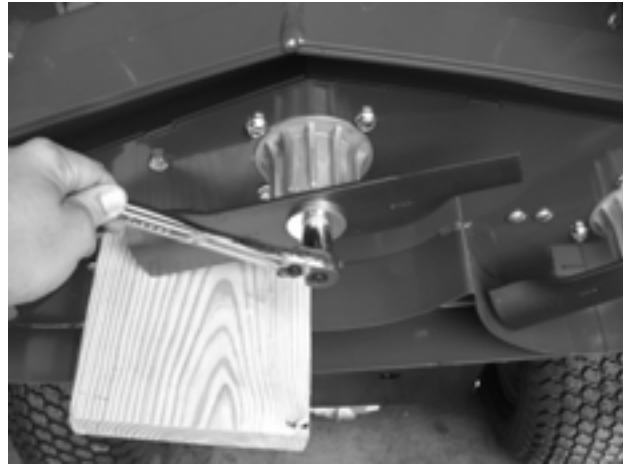


Figure 48

3. Remove belt guard cover (refer to Belt Guard Cover).
4. Remove deck drive belt (refer to Deck Drive Belt).
5. Remove deck belt (refer to Deck Belt).
6. Using 1/2" socket, remove belt guard brackets (36" models only) **Figure 49**.

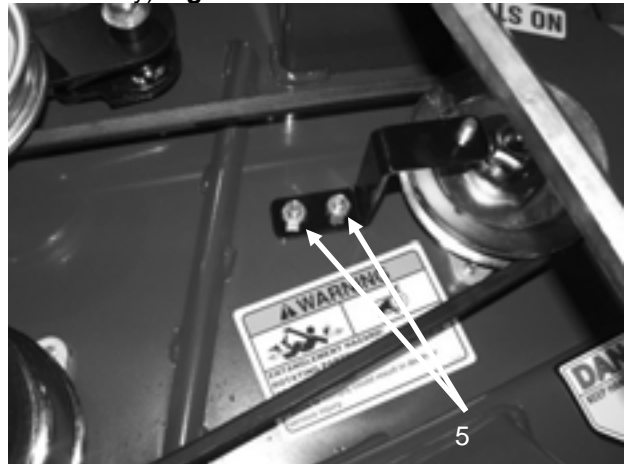


Figure 49

7. Using a 15/16" socket and 1 3/4" wrench, remove the spindle pulley nut and remove pulley being careful not to damage it.
8. Using a 1/2" socket, remove spindle mounting bolts **Figure 50**.

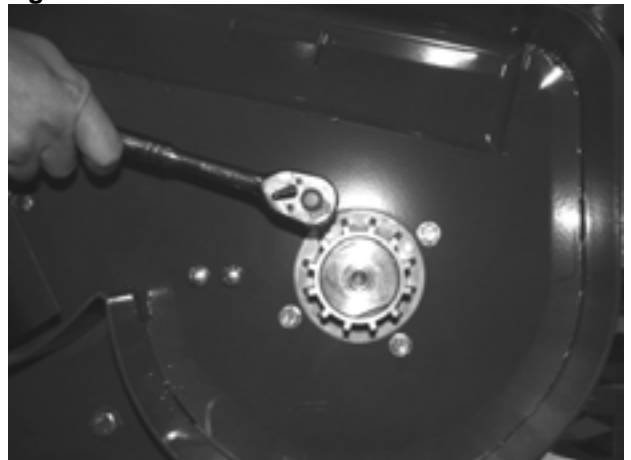


Figure 50

9. Install new spindle in reverse order.

Spindle Pulley (10251) (10252) (10483)

1. See Spindle Replacement above.
2. 36" models have two single pulleys (10252) and one double pulley (10251).
3. 44" models have two single pulleys (10252) and one double pulley (10483).
4. 32" models have two pulleys (10650).

Idler Pulley Replacement (10027) Deck Idler (10028) Deck Drive Idler

1. Remove belt guard cover (refer to Belt Guard Cover).
2. Remove deck drive belt (refer to Deck Drive Belt).
3. Remove deck belt (refer to Deck Belt).
4. Using a 9/16" wrench and 9/16" socket, remove idler pulley bolt **Figure 51**.



Figure 51

5. Install new pulley in reverse order.

Idler Spring Replacement (10029) Small (10326) Large

1. Remove belt guard cover (refer to Belt Guard Cover).
2. Remove deck drive belt (refer to Deck Drive Belt).
3. Remove deck belt (refer to Deck Belt).
4. Using 9/16" socket, remove spring retaining nut and washer and remove spring **Figure 52**.



Figure 52

5. Using a 3/4" socket and wrench, remove idler arm bolt **Figure 53**.



Figure 53

6. Replace spring and install in reverse order. **Note:** Grease idler arm after reinstalling.

Rear Wheel

1. Support the rear of the machine with a jack stand.
2. Using a 3/4" inch socket, remove the four lug nuts holding the wheel in place. **Figure 54**.



Figure 54

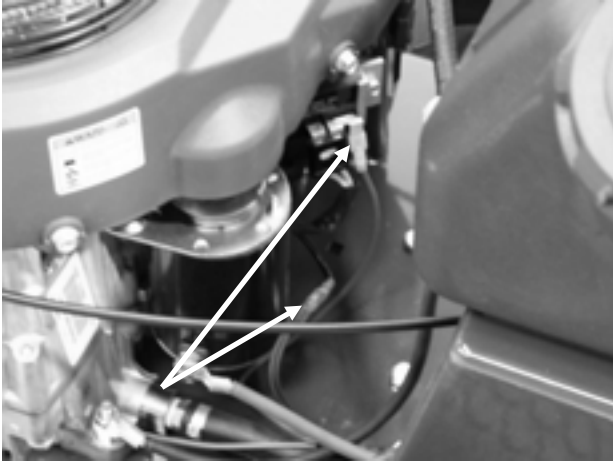
3. Remove rear wheel.
4. Install new wheel in reverse order. **Note:** Be sure that lug nuts are tight.

Front Caster Wheel (10007)

1. Using two 1-1/8" wrenches, remove axle bolt and remove wheel.
2. Install in reverse order. **Note:** When reinstalling axle bolt place a small amount of (Blue) Loctite™ on threads. Make sure wheel turns freely. **Do Not** over tighten. Also, grease wheel bearings.

Engine

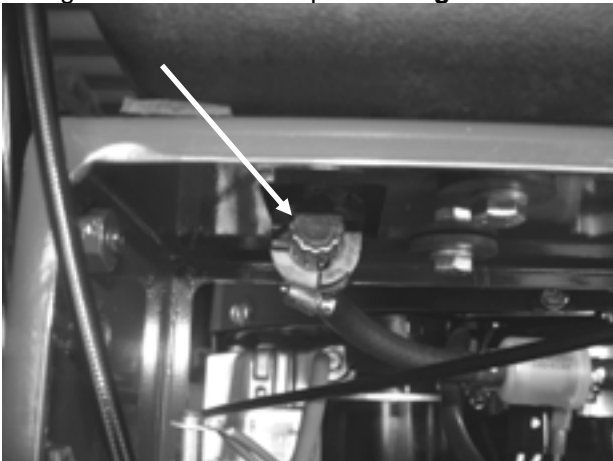
1. Remove battery if equipped (refer to Battery Replacement).
2. Disconnect wiring harness from rear of engine **Figure 55**.

**Figure 55**

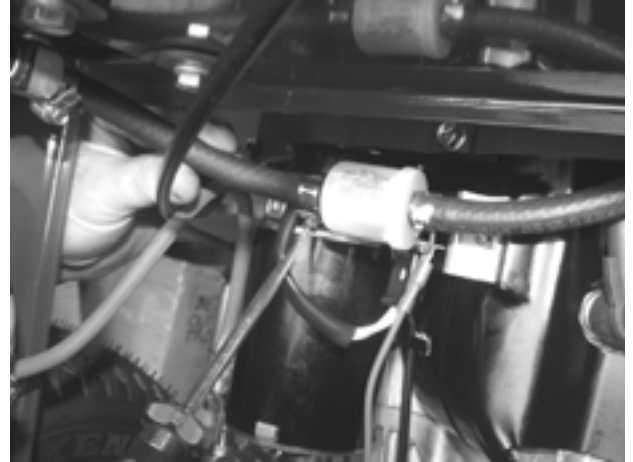
3. Using a 7/16" wrench, remove the starter cable **Figure 56.**

**Figure 56**

4. Disconnect throttle cable (refer to Throttle/Choke Cable Replacement).
5. Turn gas tank valve to Off position **Figure 57.**

**Figure 57**

6. Using a straight screwdriver, disconnect fuel line from engine **Figure 58.**

**Figure 58**

7. Remove transaxle drive belt (refer to Transaxle Drive Belt).
8. Remove clutch (refer to Clutch Replacement).
9. Using a 1/2" wrench and 1/2" socket, remove the four bolts holding the engine to the power unit.
10. Lift engine slowly while turning it so the muffler clears the heat shield (if equipped).
11. Install new engine in reverse order.

Hydro Drive Axles LH (10711), RH(10712)

1. Remove the Hydro Control Rods from Hydro Arms **Figure 59.**

**Figure 59**

2. Remove battery if equipped (refer to Battery Replacement).
3. Remove hydro drive belt (refer to Hydro Drive Belt Replacement). The belt does not need to be completely removed from the machine, just off the hydro pulleys. It can be pulled out the front of the machine and left on the clutch.
4. Using a 1/2" socket, remove the Brake Latch **Figure 60.**



Figure 60

5. It is recommended to have two people for the remaining steps. Using a 9/16" wrench and 9/16" socket, remove the two bolts holding the swingarm to the lower support **Figure 61**.

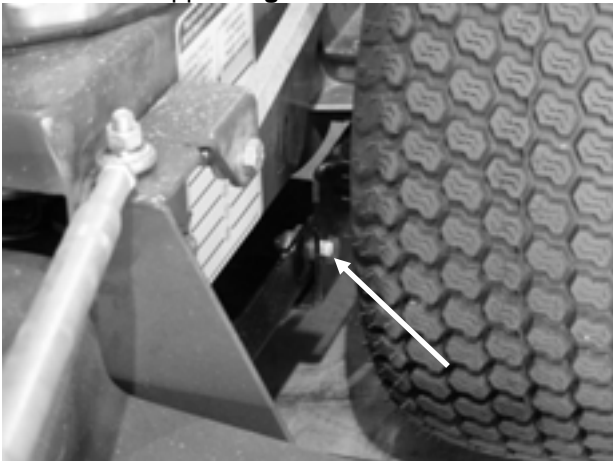


Figure 61

6. Using a 1/2" wrench and 1/2" socket with extension, remove the eight nuts securing the hydro assembly to the frame **Figure 62**.



Figure 62

7. Using a 1/2" wrench and 1/2" socket, remove the two bolts securing the rear of the hydro assembly to the frame **Figure 63**.



Figure 63

8. You should be able to lift up on the handlebars and roll the machine off of the hydro assembly. **Note:** Be careful that the dump valves are clear of the slots before lifting up, as they may bend.
9. Remove the wheels from the hydro assembly (refer to Rear Wheel Replacement).
10. Determine which hydro pump needs to be replaced.
11. Using a 9/16" wrench and 9/16" socket, remove the two bolts that connect the hydros **Figure 64a, 64b**.

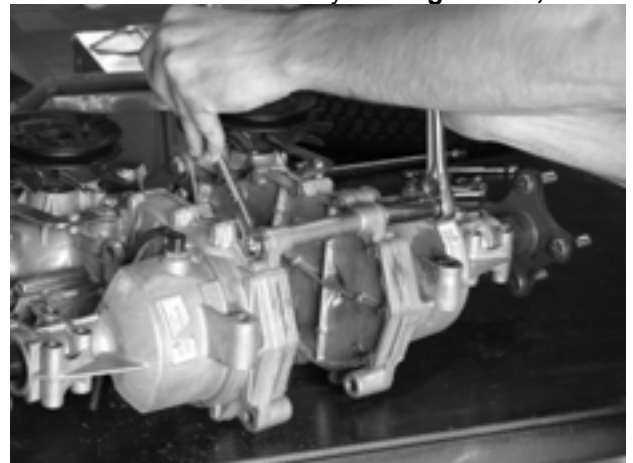


Figure 64a

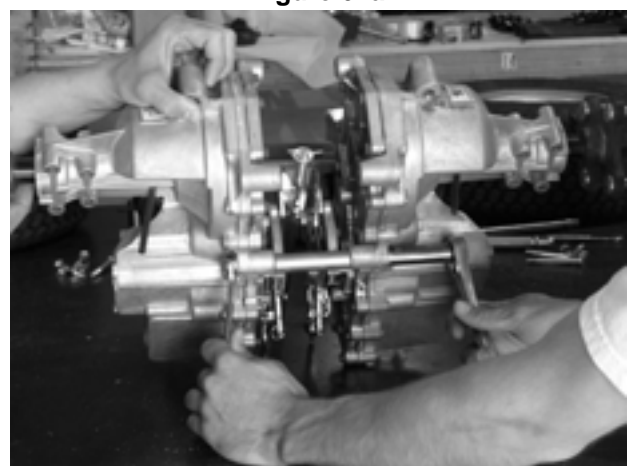


Figure 64b

12. Using needle nose pliers, remove the cotter pin securing the brake yoke to the brake lever **Figure 65**.

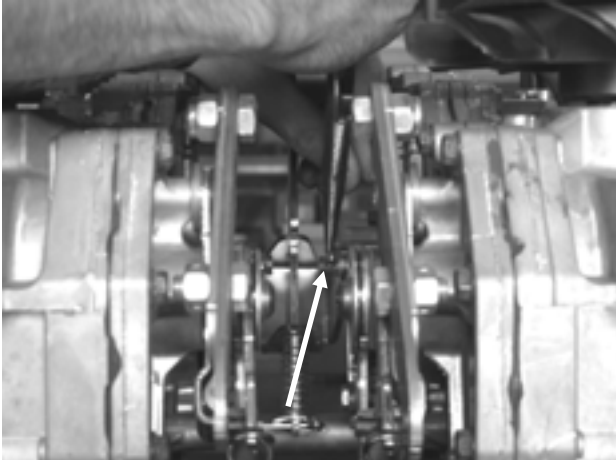


Figure 65

13. Using a 1/2" wrench and 1/2" socket, remove the four nuts securing the hydro pump to the lower support **Figure 66**.

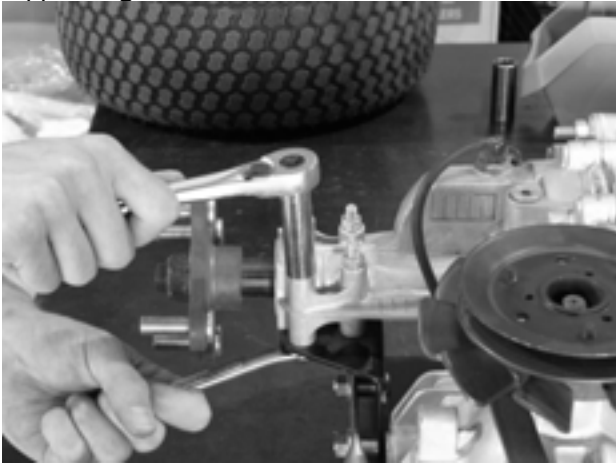


Figure 66

14. Using a 7/16" wrench and Phillips head screwdriver, remove the dump valve lever and install it on the new hydro pump **Figure 67**.

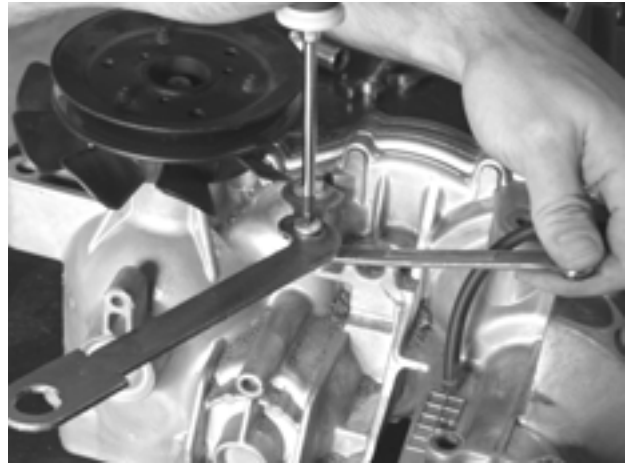


Figure 67

15. Using a 9/16" wrench and 9/16" socket, and a 5/8" wrench and 5/8" socket, remove the bolts securing the hydro arm to hydro pump **Figure 68**.

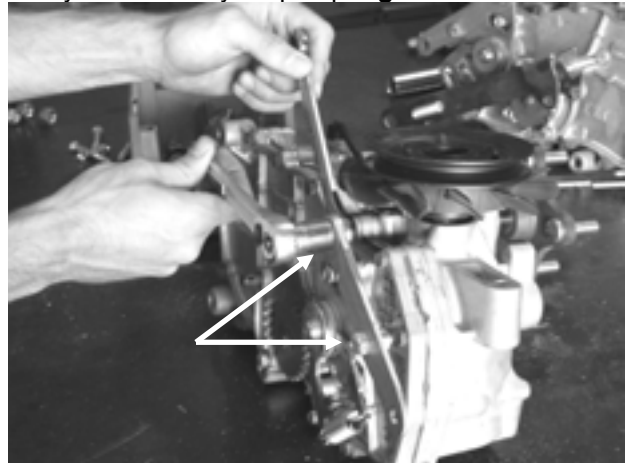
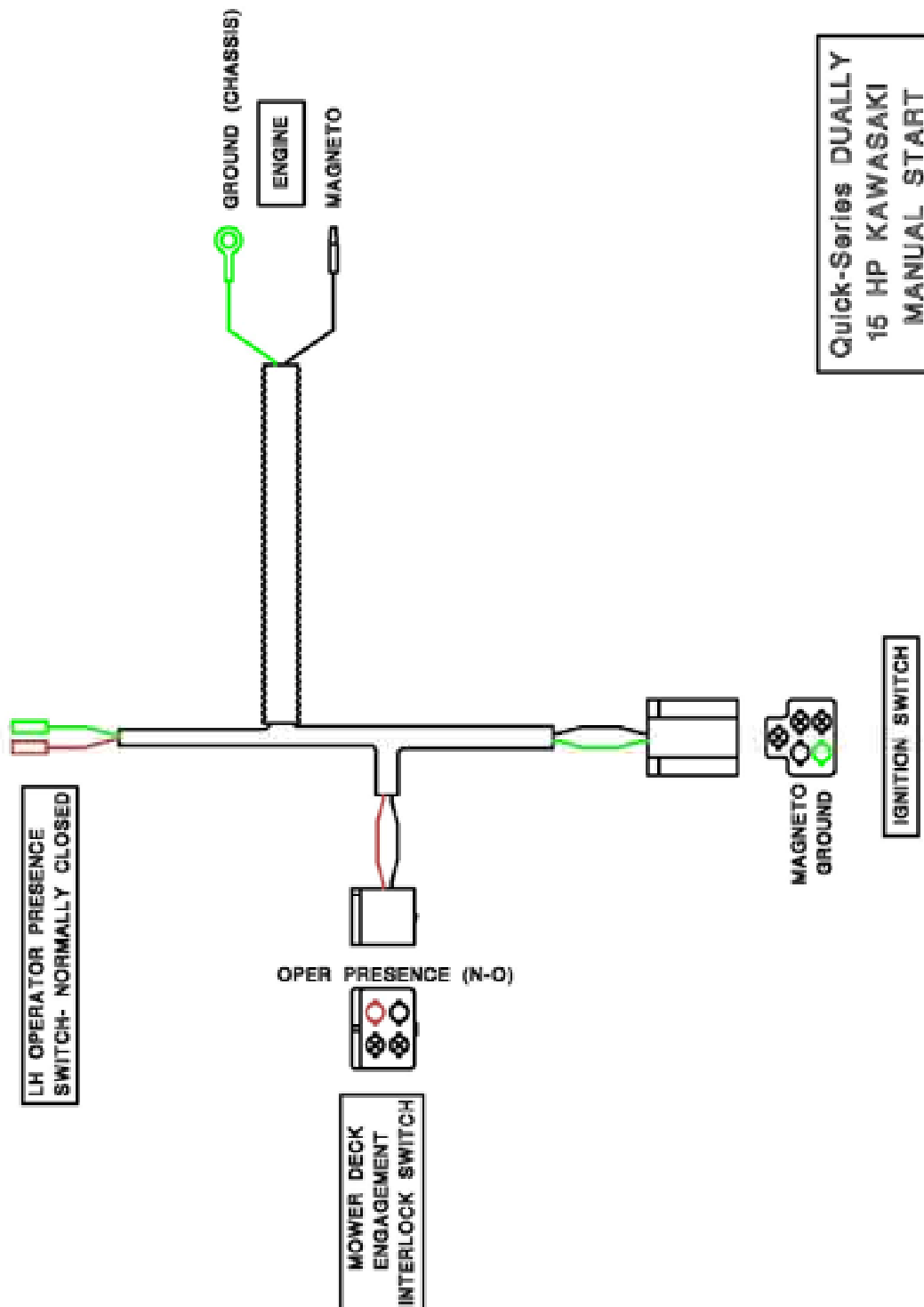


Figure 68

16. Remove the hydro arm and install it on the new hydro pump.
17. Install the hydro pump back onto the lower support.
Note: It is important to follow these steps in order for the hydro pumps to seat properly. Install the two bolts that connect the hydro pumps and then back off one full turn. Install the four bolts that secure the hydro pump to the lower support and tighten. Tighten the two bolts connecting the hydro pumps.
18. Reinstall the hydro assembly in the reverse order, making sure that the dump valve levers and parking brake go back into their respective slots. Also, make sure that the belt seats in the idler pulley and both hydro pump pulleys.

Wiring Schematics





Accessories

Mulching Kit (ACC-0013) 36" models (ACC-0014) 44" models

1. Support front of machine with jack stand **Figure A**.



Figure A

1. Slide mulch plate into place **Figure B**.



Figure B

2. Insert carriage bolt through hole in mulching kit and through hole in deck **Figure C**.



Figure C

3. Secure with lock washer and knob.

4. Insert carriage bolt through hole in deck and through hole in mulching kit **Figure D**.



Figure D

5. Secure with flat washer, lock washer, and knob.

Gator Blades (ACC-0002) 36" models (ACC-0011) 44" models

Note: Install Gator blades teeth up.



1. Support the front of machine with jack stand.
2. Secure blades so that they will not spin and remove blades **Figure E**.

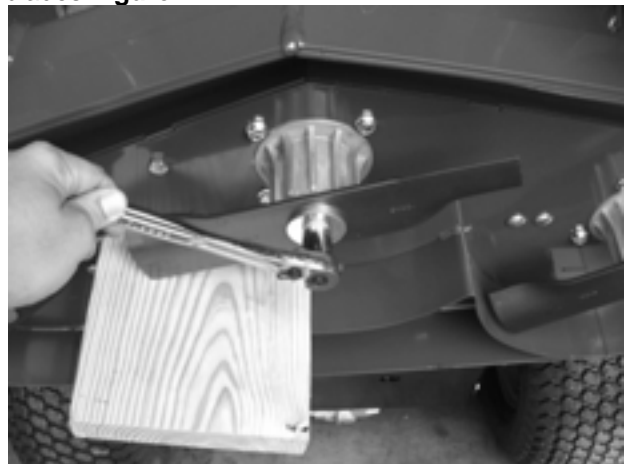


Figure E

3. Install new Gator blades making sure to keep bolt, lock washer, and blade washer in correct order **Figure F.**

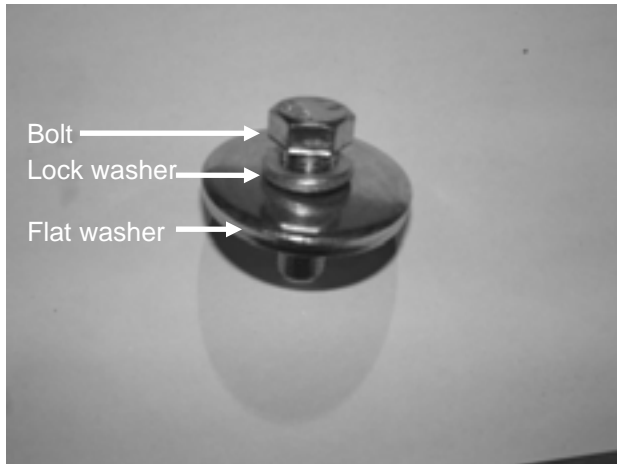


Figure F

Note: It is important to keep blades sharp for a good quality of cut.

Mulching Tips

Obtaining good results when mulching depends on a lot of different variables: Moisture content of the grass, thickness of the turf, ground speed of the mower, etc., are just a few of the factors determining performance. But, the two cardinal rules of mulching are:

1. Mulch when it's fairly dry.
2. Mulch often.

If the grass is damp (recently rained, morning dew, sprinkler has been running, etc.), the clippings can clump together and become too heavy to remain aloft and recirculate under the deck. That's why it's important to mulch when it's dry, so that the grass is light enough to remain moving under the deck and recycle through the cutting blades.

A mistake people sometimes make when transitioning from side discharge mowing to mulching is to mow on the same "once every week to ten days" schedule they've been used to in the past. When mulching, one should mow the area every 4-5 days. Because if the grass becomes too long, the deck can simply become overwhelmed with the volume of clippings. Mowing more often keeps the volume manageable.

Striping Roller (ACC-0009) 36" models (ACC-0019) 44" models

1. Install mounting arms in existing holes in rear of frame **Figure Q.**

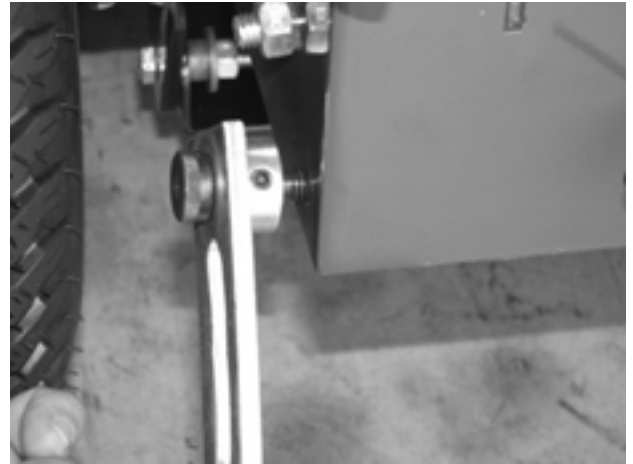


Figure Q

2. Attach mounting arms to the green slotted channel.
3. Adjust striping assembly left or right to center behind the mower.
4. The system should now be capable of free floating independently from the mower itself.

Grass Catcher (ACC-0001)

1. Using two 9/16" wrenches, remove chute **Figure R.**

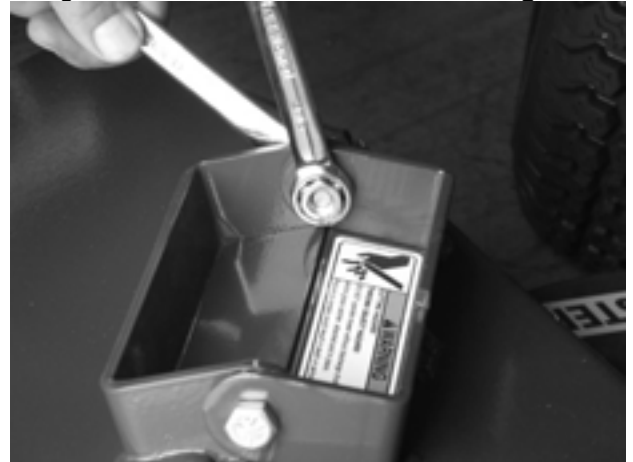


Figure R

2. Install by aligning the two pins on grass catcher to the holes that the chute was attached to **Figure S.**

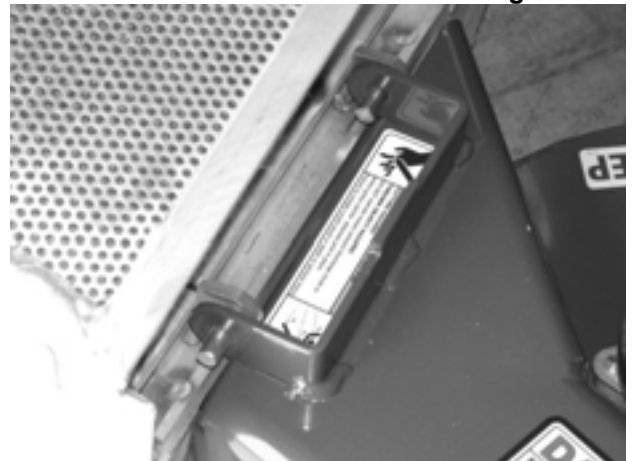


Figure S

Warranty

Warranty

Proper maintenance of equipment purchased from Better Outdoor Products™ is the Owner's responsibility. Follow the instructions in your Owner's Manual for the proper maintenance schedule. Better™ can provide you with the complete line of genuine parts and accessories necessary to keep your machine running like new. All parts orders are shipped directly to your door the same day the order is received (for orders placed before 3:00 PM Eastern Time).

We proudly stand behind the quality of every Quick Dually™-Series Mower, by offering a:

Two-Year Residential Homeowner and One-Year Commercial Operator Warranty.

This limited warranty for residential homeowners covers any defect in materials or workmanship in your Better Outdoor Products™ Quick Dually™ mower for two years from the date of purchase for the original buyer.

Better Outdoor Products™ mowers used commercially are warranted for one year to the original buyer. Commercial use is defined as either having hired operators or used for income producing service.

We will repair or replace any part or parts found at our sole discretion to be defective without charge, directly to the original owner of record.

Portions of Better Outdoor Products equipment are warranted separately by their respective manufacturers:

Kawasaki Engines: Two years in homeowner use; One year in commercial use.

Hydro Gear Axles: Two years in homeowner use; One year in commercial use.

Battery: One year prorated limited warranty with 100% replacement in the first 90 days.

ITEMS NOT COVERED BY THIS WARRANTY

This warranty does not cover maintenance items such as lubricants, filters, cleaning, tune-ups, brake and/or clutch inspection, adjustments made as part of normal maintenance, blade sharpening, set-up, abuse, misuse, negligence, accidents, and normal wear. It does not cover incidental or consequential costs such as transporting your equipment to and from a dealer, telephone charges or renting a product temporarily to replace a warranted product.

There is no other warranty expressed or implied.

HOW DO STATE LAWS APPLY?

The limited warranty gives you specific legal rights, and you may also have other rights, which vary from State to State.